OPERATING AND MAINTENANCE ADDENDUM
TO THE
AGREEMENT FOR THE
CENTRAL CORRIDOR LIGHT RAIL TRANSIT PROJECT
THROUGH THE UNIVERSITY OF MINNESOTA,
TWIN CITIES – MINNEAPOLIS CAMPUS

The parties to the above-referenced Agreement, the Met Council, the University, Hennepin County, and Minneapolis (the City) agree that the Agreement should be amended as set out in this Addendum. Except as expressly changed or added to by this Addendum, the Agreement remains unchanged and in full force and effect.

ARTICLE 1 - DEFINITIONS

Except as set out below, all provisions of Agreement Article 1 remain unchanged. For the purposes of this Addendum, the following additions apply:

1.1 Amenity Zone – That portion of the Transit/Pedestrian Mall between the LRT tracks and on the two blocks bounded by Harvard Street S.E. and Walnut Street S.E. and by Union Street S.E. and Church Street S.E.

1.2 Bike/Emergency Vehicle Lane – Section of the Transit/Pedestrian Mall that is between the LRT System guideway and the sidewalk.

1.3 Central Corridor LRT System or LRT System – All equipment, land and facilities owned by the Met Council and associated with the operation of LRT including but not limited to the tracks, the raised curb on each side of each track, stations, transit operating systems, equipment, including gate arms, flashing lights, warning devices, train control equipment and traction electrification equipment, LRT vehicles, mitigation systems, monitoring systems and Met Council-owned art work.

1.4 Emergency Operations Plan – The Emergency Operations Plan establishes the response process and responsibilities for the various Metro Transit departments, employees, and outside agencies in the event of a rail emergency.

1.5 EMI Impact Zone – The EMI Impact Zone is depicted in Exhibit O to this Addendum, which supersedes Exhibit C to the Agreement.

1.6 Emergency Vehicle Preemption ("EVP") – Systems that interrupt the normal traffic signal cycle to provide a green light for the emergency vehicle and a red light for all other traffic at or approaching the signal so the emergency vehicle can pass through the intersection safely.

1.7 Transit Bus – Any vehicle operated by a transit provider, the purpose of which is to provide public transportation.

1.8 Joint Use Section – The portion of the Transit/Pedestrian Mall between approximately Church Street and Walnut Street on which transit buses shall operate jointly with light rail vehicles on the LRT System guideway as depicted in Exhibit A.

1.9 LRT Area – The area that includes the Central Corridor LRT Work Zone and Central Corridor LRT Stations as those terms are defined below, and the real property owned by the Met Council that will be used for the operation and maintenance of the LRT System.

1.10 LRT Signals – Signals used to govern movement of light rail vehicles and provide light rail specific information to roadway vehicles (such as gate arms, flashers, bar signals, train approaching blank out signs and no right hand/left hand turn blank out signs, etc.).

1.11 LRT Station – The passenger loading facilities for the LRT System, including, but not limited to, platforms, canopies, barriers and railings, pedestrian access walkways, special handicap access facilities, all functional and architectural features and landscaping.

1.12 LRT Work Zone – The LRT Work Zone is defined as the area where work is performed within the areas described as follows:

- Work will occur on, over or under a street from edge to edge of the Road Authority's street right-of-way which includes but is not limited to the sidewalk area and the travel lanes adjacent to the LRT tracks.
- Work will occur on, over or under a street that crosses at-grade within twelve (12) feet on each side of the center line of each track.

1.13 LRT Work Zone Access Procedures – Procedures identified by Met Council for working in, on, or around the LRT System, including track allocation procedures, work scheduling requirements, notification procedures and work permit procedures.

1.14 OCS – Acronym for "Overhead Contact System". Consisting of all facilities for overhead traction power distribution to the light rail system, including, but not limited to, (Traction Electrification System) TES poles, overhead wires, underground wires, hardware and appurtenances.

1.15 Traffic Control Signal (Traffic Signal) – Any highway traffic signal by which traffic is alternatively directed to stop and permitted to proceed.

1.16 Transit Providers – For purposes of this Agreement, transit providers are defined as those certified by Metro Transit to operate on the Transit/Pedestrian Mall.

ARTICLE 2 – TERM

The rights and obligations of the parties created or altered by this Addendum will commence on the date this Addendum has been executed by all parties. Otherwise, all provisions of Agreement Article 2 remain unchanged. The City's obligations as contained in this Addendum are specifically contingent upon the completion of the property transfers contained in Article 9 of the Agreement and the term of this Addendum shall not begin for the City until such time as the property transfers have been effected.

ARTICLE 3 – GENERAL AGREEMENTS ON PROJECT DEVELOPMENT

Except as set out below, all provisions of Agreement Article 3 including Exhibits remain unchanged.

3.5.A Required Project Improvements – Signage and Way-finding: The Met Council shall pay to the University the maximum amount of twenty-thousand ($20,000) to install new directional signage made necessary as a result of Central Corridor LRT and the closure of Washington Avenue to vehicular traffic. Any signs installed on City right-of-way will require City approval.

ARTICLE 4 – PROJECT ENGINEERING & DESIGN, CONSTRUCTION

For purposes of this Addendum, all provisions of Agreement Article 4 remain unchanged.

ARTICLE 5 – MITIGATION OF ADVERSE IMPACTS DURING CONSTRUCTION AND OPERATION

Except as set out below, all provisions of Agreement Article 5 including Exhibits remain unchanged.

5.2.A.2.a is amended to read as follows:
Vibrations caused by the Central Corridor LRT shall not exceed the existing ambient vibration condition on the University Campus. The "existing ambient vibration condition" is defined as the long term energy equivalent vibration level (Leq) of the floor vibration measured prior to LRT construction in a specific set of 19 laboratories identified on Exhibit P of the Agreement and as amended in Exhibit P of this Addendum generally occurring over a period of 20 to 24 hours (long term ambient Leq).

The University has agreed to this one-time amendment of the Vibration Performance Standards for Kolthoff Hall to allow the Met Council to be able to certify compliance with the Performance Standards as required by the Agreement in order to begin Revenue Service. The alternative would be to reduce the speed of the trains passing Kolthoff Hall to 15mph. The University will not entertain any further incremental

amendments to the Vibration Performance Standards in the future.

The term of this Amendment will be one (1) year from the date revenue service commences and shall expire at that time unless the University and the Met Council have, prior to that expiration, agreed to renew this Amendment by an express writing executed by both parties. In the event the University declines to extend the Amendment, it will share its supporting documentation and provide the Met Council 120 day notice to implement a corridor based solution or operational adjustments needed to meet the original standards.

Further, the University reserves the right to require the Met Council to comply with the original Vibration Performance Standards established in the Agreement at any time in the future if the University reasonably determines that the amended Performance Standards limit the University's ability to effectively conduct research. The University will review the supporting documentation for this determination with the Met Council. The University will provide the Met Council 120 days notice to allow the Met Council to implement a corridor based solution, make operational adjustments, or propose site-based mitigation measure required to meet these standards. The University may reasonably reject any such site-based mitigation measures. The use of site based mitigations rather than the required corridor based or operational measures only applies in this particular instance of the amended Performance Standards at Kolthoff Hall.

5.3.A.1. is amended to read as follows:

EMI within the EMI Impact Zone caused by Central Corridor LRT operations shall not exceed the EMI Performance Standards. The EMI performance standards are as follows and supersede the table included in Section 5.3.A.1. of the Agreement. The University has agreed to this one-time amendment of the EMI Performance Standards to allow for the Met Council to be able to certify compliance with the Performance Standards as required by the Agreement in order to begin Revenue Service. The University will not entertain any further incremental amendments to the EMI Performance Standards in the future.

The term of this Amendment will be one (1) year from the date revenue service commences and shall expire at that time unless the University and the Met Council have, prior to that expiration, agreed to renew this Amendment by an express writing executed by both parties. In the event the University declines to extend the Amendment, it will share its supporting documentation and provide the Met Council 120 day notice to implement a corridor based solution or operational adjustments needed to meet the original standards.

Further, the University reserves the right to require the Met Council to comply with the original EMI Performance Standards established in the Agreement at any time in the future if the University reasonably determines that the amended Performance Standards limit the University's ability to effectively conduct research. The University will review the supporting documentation for this determination with the

Met Council. The University will provide the Met Council 120 days notice to allow the Met Council to implement a corridor based solution, make operational adjustments, or propose site-based mitigation measure required to meet these standards. The University may reasonably reject any such site-based mitigation measures. The use of site based mitigations rather than the required corridor based or operational measures only applies in this particular instance of the amended Performance Standards.

	Total EMI Performance Standard **LRT EMI Mitigation Zone-wide**	**Total EMI Performance Standard** **Exception Zone**
Bz Performance Standard	Not to exceed 2 mG at 75 feet and beyond**	Not to exceed 2 mG at 75 feet and beyond for 90% of train passbys per day and not to exceed 2 mG at 100 feet and beyond for the other10% of train passbys per day
dBz/dt Performance Standard	Not to exceed 5 mG/second at 75 feet and beyond	Not to exceed 5mG/second at 75 feet and beyond
Br Perfomance Standard	Not to exceed 2 mG at 110 feet and beyond	Not to exceed 2 mG at 100 feet and beyond for 90% of train passbys per day and not to exceed 3 mG at 100 feet and beyond for the other10% of train passbys per day*
dBr/dt Performance Standard	Not to exceed 5 mG/second at 100 feet and beyond	Not to exceed 5 mG/second at 100 feet and beyond

*Except for that distance of 135 feet easterly of the western edge of Kolthoff Hall where the Br field shall not exceed 2mG at 100 feet and beyond for 90% of train passbys per day and the BR field shall not exceed 3.5 mG and beyond for the other 10% of train passbys per day.
** Except for an area just west of Walnut Street extending to the eastern limits of the EMI Impact Zone as illustrated in Exhibit O where the Bz fields may exceed 2 mG up to 110 ft from the track center line rather than at 75ft.

a. EMI threshold values are understood to be at the stated *75* foot, 100 foot, and 110 foot distances of interest perpendicular to the nearest track center-line and at an elevation of 3 feet from the top of rail.
b. Train passbys means any instance when a train passes through the EMI Impact Zone.
c. These EMI Performance Standards include operating conditions, including but not limited to emergency or other unanticipated LRT stops, outages of substations, degradation over time of LRT wiring and connections, unanticipated changes in critical current balances, future changes in LRT equipment or operations including additional cars.

For the purposes of this Addendum, the following additional terms apply:

5.9 As part of monitoring the performance of the Central Corridor LRT relative to meeting agreed-to Vibration Performance Standards, the Met Council installed three systems that will provide for long-term and continuous monitoring.

5.9.A Wheel Flat Detection System

5.9.A.1 General Location of System – As part of construction of the CCLRT, Met Council has designed and installed a wheel flat detection system. One detector is located on the LRT tracks at approximately the mid-point of the Washington Avenue Bridge to detect flat wheels on eastbound trains. A second detector is located along the LRT tracks adjacent to the University Transitway to detect flat wheels on westbound trains.

5.9.A.2 Functionality of System – The wheel flat detection system is capable of detecting light rail vehicle wheel flatness. Appropriate levels for these settings will be established with the University during CCLRT pre-revenue service and may be based, in part, on the results of vibration testing and monitoring, as discussed in Exhibit P of the Agreement.

5.9.A.3 System Maintenance – Maintenance of the wheel flat detection system shall be the responsibility of the University. The Met Council will use Metro Transit staff to perform regular system maintenance, including repair and replacement, at the University's expense. Met Council will inform the University before any maintenance is performed. If an external vendor is needed, the University and the Met Council will jointly participate in the selection process.

5.9.A.4 Sharing of System Data – Data recorded by the wheel flat detection system will be stored in a server owned and maintained by the Met Council. The University will be provided constant (internet or other) access to the data to view and download, as desired.

5.9.B Near-Track Vibration Monitoring System

5.9.B.1 General Location of System – As part of construction of the CCLRT, Met Council has designed and installed a system of near-track vibration monitors, as illustrated in Exhibit C.

5.9.B.2 Functionality of System – Impacts from LRT-induced vibration will be collected during pre-revenue service testing Exhibit D to this Addendum provides details on system functionality.

5.9.B.3 System Maintenance – Maintenance of the near-track vibration monitoring system shall be the responsibility of the Met Council.

5.9.B.4 Sharing of System Data – Data recorded by the near-track vibration monitoring system will be stored in a server owned and maintained by the Met Council. The University will be provided constant

(internet or other) access to the data to view and download, as desired.

5.9.C In-Building Vibration Monitoring System

5.9.C.1 General Location of System – The Met Council and the University will jointly develop plans for an in-building vibration monitoring system using test data resulting from certification protocols described in Exhibit N to the Agreement. The University will approve these plans, prior to their implementation by the Met Council. The Met Council will ensure installation and operation of the system by October 1, 2014.

5.9.C.2 Functionality of System – The function of the in-building vibration monitoring system is discussed in concept in Exhibit C of the Addendum.

5.9.C.3 System Maintenance – Maintenance of the in-building vibration monitoring system shall be the responsibility of the University.

5.9.C.4 Sharing of System Data – Data recorded by the in-building vibration monitoring system will be stored in a server owned and maintained by the University. The Met Council will be provided constant (internet or other) access to the data to view and download, as desired.

5.10 Operational Changes to Meet Performance Standards

5.10.A Operational Changes to Meet Vibration Performance Standards. Met Council has committed to making operational changes in order to certify that CCLRT operations will comply with the Performance Standards in the Vibration Impact Zone at Amundson Hall. Specifically, Met Council will limit the speed of trains on both the north and south track between a location immediately west of the East Bank Station platform and through the intersection of Church Street to a speed of 15 miles per hour. Met Council reserves the right to return to light-rail vehicle speeds as set forth in the Agreement at this location should future testing of vibration (as specified in Exhibit P to the Agreement) demonstrate that doing so will achieve performance standards as set forth in Exhibit P to this Addendum. Before Met Council increases train speeds, the Met Council will follow a testing process and certification protocol mutually agreed to by the Met Council and the University.

5.10.B Operational Changes to Meet EMI Performance Standards. Met Council has committed to making operational changes in order to achieve EMI Performance Standards. Specifically, the Met Council will limit the speed of westbound light rail vehicles entering the Washington Avenue Bridge to 30 miles per hour.

5.10.C As part of monitoring the compliance of the operational changes required to meet the performance of the Central Corridor LRT relative to meeting agreed-

to Vibration and EMI Performance Standards, the Met Council agrees to work with the University to identify and install a speed monitoring system at agreed-upon locations, not to exceed four (4). The monitoring system will be used to provide continuous data collection of train speed. If at a future date operational changes are not needed to meet Vibration and EMI Performance Standards, the Met Council may remove the speed monitoring system at its own expense.

Speed-Monitoring System Maintenance – The Met Council commits to an amount not to exceed $100,000 for the initial cost and installation of the speed-monitoring system. The Met Council will be responsible for reasonable costs associated with ongoing maintenance of the speed-monitoring system.

Speed-Monitoring / Sharing of System Data – The Met Council will work with the University to determine whether technology exists at reasonable cost to provide constant (internet or other) access to the data recorded, as desired.

ARTICLE 6 – PARTIES' RIGHTS RELATED TO THE TRANSIT/PEDESTRIAN MALL

Except as set out below, all provisions of Agreement Article 6 remain unchanged. For the purposes of this Addendum, the following additions apply:

For the purposes of this Addendum, 6.2.D Design and Maintenance of the Agreement shall be deemed deleted.

6.3.A Traffic and Parking

In addition to the vehicles identified in 6.3.A, the following will be allowed on the Transit/Pedestrian Mall:

- Transit supervisory vehicles (bus and rail) as needed to perform the following support services:
  - Respond to train / bus accidents or incidents
  - Respond to systems failure (OCS, TPSS outage, etc.)
  - Perform LRT / bus passenger welfare check on a station platform / bus stop
  - Respond to disabled vehicle(s)
  - Post information on LRT and/or bus stop closures, relocations, route changes, etc.

6.3.A.1 Transit Supervisory Vehicle Parking – In an effort to reduce the presence of vehicles on the Transit/Pedestrian Mall, the Vice President for University Services, or his/her designee, will provide adequate parking accommodations for Metro Transit and City of Minneapolis Public Works supervisor vehicles when being used for the purposes of performing non-emergency services, such as traffic and speed monitoring and evaluation. The number and

location of such spaces shall be determined by the University in consultation with Metro Transit and City of Minneapolis Public Works staff administering this Agreement.

6.3.A.2 Truck Access through University property – Because the segment of Washington Ave between Walnut St. and Harvard St. is permanently closed to general vehicular traffic, to accommodate LRT, it is necessary to maintain truck access through University property.

The route is illustrated in Exhibit S and is to continue on Harvard St., turn right onto Beacon St., continue on Beacon St., and then turn right at the intersection of Walnut St/Beacon St, at which point, vehicles are back on public property.

ARTICLE 7 – OPERATIONS AND MAINTENANCE

As set forth in Article 7.A of the Agreement, the Parties have negotiated operations and maintenance responsibilities of the Central Corridor LRT line and associated stations and facilities and these provisions are documented in this Addendum. Article 7.A, is deemed deleted by the provisions of this Addendum. All other provisions of Article 7 remain unchanged.

7.1.A Except as otherwise provided in this Addendum and the Agreement, each Party is responsible for all operations and maintenance related with its streets and/or infrastructure.

7.1.B Except as otherwise provided in this Addendum, the Met Council is responsible for the operation and maintenance of the Central Corridor LRT System.

7.1.C Except as otherwise provided in this Addendum, the University is responsible for the day-to-day maintenance, including snow removal and solid waste removal in the Amenity Zone and maintenance of the landscaping as depicted in Exhibit E. Landscaping by the University will be maintained so that it does not create an unreasonable harm to the operation of LRT vehicles or buses.

7.1.D The party responsible for infrastructure maintenance shall do so in a timely fashion so as to avoid potential safety or other issues caused by infrastructure that is not in good repair. If any party to this Addendum has reason to believe that maintenance may be required for infrastructure that is not its responsibility, that party may notify the responsible party in writing of the observed situation. The party that has been notified will respond to indicate whether it concurs that maintenance actions are required and what likely actions will be taken.

7.1.E The parties shall meet as needed to resolve any rail, bus, bicycle and/or vehicle operation; pedestrian movement, safety, aesthetics or maintenance issues

related to the operations through the University Campus, including the Transit/Pedestrian Mall. The meeting shall be chaired by Metro Transit's Chief Operations Officer, or his/her designee, and shall include the Minneapolis City Engineer, the Hennepin County Public Works Director, and the Vice President for University Services, or respective designees.

Any of the parties to this Addendum may call for a review of Joint Use Section operations and/or operations on the Bike/Emergency Vehicle Lane along the Transit/Pedestrian Mall should such parties believe that such operation unreasonably increases the risk to pedestrians, cyclists and vehicles using the Transit/Pedestrian Mall. This review of operations along the Transit/Pedestrian Mall will be initiated by a request in writing to the Met Council, which will be responsible for gathering the performance data and for calling a meeting of the parties within a reasonable time frame. If the Met Council is initiating the review, the Met Council will notify the other parties in writing and will gather the performance data and call the meeting. The request for review shall note the issue or concern and provide any further information or data to inform parties in advance of the review meeting.

At any meeting of the parties, as described above or in 6.3.D of the Agreement any party may propose changes in Transit/Pedestrian Mall operations that would address issues or concern, and/or enhance operations of the Transit/Pedestrian Mall and the Joint Use Section. Pursuant to Stipulation 6.3.D of the Agreement, proposed changes in operations that would permit buses to operate on the Bike/Emergency Vehicle Lanes and off the Joint Use Section would require agreement of the Met Council, the Road Authority, and the University.

7.1.G Public Safety

Public-safety related issues including law enforcement jurisdictional authority, arrest and ticketing procedures, and security camera operations, are documented in a separate agreement between the various law enforcement agencies.

7.2 Work within the Central Corridor LRT Work Zone

7.2.A <u>Work by Parties Other than the Met Council</u>

7.2.A.1 When work is to be performed in or near the Central Corridor LRT Work Zone, the party must obtain a work permit at no cost from the Met Council in accordance with Met Council's Work Zone Access Procedures in effect at the date of application for a work permit. This procedure is to be used anytime when:

- Scheduled work will occur within 12-feet of centerline of the rails without a physical barrier.
- Scheduled work will occur within the adjacent roadway travel lane without a physical barrier.

- Scheduled work will occur on or within any structure or property that can affect train service (e.g., traction power substation, communication signal house, passenger platforms).
- Scheduled work will affect the movement of passengers to or from trains.
- Scheduled work will occur within 20-feet of the OCS and requires the use of a crane or derrick.
- In case of emergency work, work parties must contact the Rail Control Center at 612-341-5710 for emergency access prior to commencement of the work.

7.2.A.2 It is acknowledged that, from time to time, work activities proposed by Hennepin County, the City of Minneapolis, the University, or contractors to these parties may require the Met Council to adjust train operations, de-energize power lines, or temporarily remove Central Corridor LRT System equipment. In such cases, Met Council shall not charge the parties for revenue lost due to these work activities.

7.2.A.3 Nor shall the parties charge the Met Council for work outside of normal working hours. Hennepin County, City of Minneapolis, and University staff shall confer with Met Council staff in planning work required to operate and maintain the parties' respective infrastructure so as to minimize the potential for LRT system disruption occurring from routine maintenance activities.

7.2.A.4 Each Party shall ensure that its employees and contractors performing maintenance in close proximity to the LRT tracks in the Amenity Zone or elsewhere within the Transit/Pedestrian Mall (as depicted in Exhibit B) have completed, before working in such areas, an on-track right-of-way safety training program, which shall be provided by the Met Council without charge to the Parties and/or its contractors. Close proximity is defined as work within 12-feet of centerline of the rails without a physical barrier and/or work within 20-feet of the OCS that requires the use of a crane or derrick.

7.2.B Permission to Work within the LRT Work Zone – Permission to work within or encroach into the Central Corridor LRT Work Zone shall be obtained via the work permit procedures according to the Met Council's Work Zone Access Procedures and shall be granted thusly:

City permit(s) and or University permits may be needed in addition to the Met Council's LRT work permit including but not limited to obstruction permits, encroachment permits, utility permits, building permits, etc.

7.2.B.1 The City of Minneapolis has developed an obstruction permit process to facilitate the notification and understanding of where streets are partially or wholly impacted by construction, utilities, events, etc. The Met Council and University agree to use this

process when impacting said City streets so that the Met Council and/or the City of Minneapolis can take necessary traffic management actions. Approval or rejection of the Obstruction Permit Application is at the discretion of the City Engineer or designee, per Minneapolis Code of Ordinances 429 and 430 or similar successor provisions. The City shall waive the obstruction permit fees for the Met Council and the University and/or their contractors when work is associated with a LRT System reconstruction project or LRT-related maintenance activity. This fee or cost waiver does not apply to or include land use development related street or utility work. . The City shall waive obstruction permit fees, for the University and its contractors, for work within the University Campus, defined here for obstruction permit fee waiver purposes as Exhibit R, In the event that the University believes this waiver applies, the University will provide a copy of this Addendum, including Exhibit R, at the time of the application. In the event that a lane is obstructed without an obstruction permit or conditions of a permit are not met, penalties shall apply at the discretion of the City Engineer or designee, per Minneapolis Code of Ordinances 429 and 430 or similar successor provisions.

7.2.B.2 Met Council shall not disallow work, encroachments, or other activities within the Central Corridor LRT Work Zone unless Met Council can demonstrate that such activities are in direct conflict with the safe and efficient operation of the Central Corridor LRT System.

7.2.B.3 Area-Specific Permissions are as follows:
Washington Avenue / East Bank Campus/University Area – Permission to work within or encroach into the Central Corridor LRT Work Zone in this area shall not be granted unless authorized by the Road Authority and the Met Council. The University shall be consulted with regarding any work occurring on Washington Ave / East Bank Campus.

University Transitway between 23rd Ave. SE and 29th Ave. SE – Permission to work within or encroach into the Central Corridor LRT Work Zone in this area shall not be granted unless authorized by the University and the Met Council.

7.3 Transit Operations

7.3.A Not Used.

7.3.B Train Operations

7.3.B.1 Train Schedule – Met Council reserves the right to schedule Central Corridor LRT service to maximize operational efficiencies

while safely and efficiently meeting passenger demands. Met Council recognizes the interests of the City, the County and the University in maintaining safe and efficient traffic movements and maintaining safe and efficient mobility for pedestrians and bicyclists. Met Council will take these interests into consideration when setting the Central Corridor LRT schedule and when contemplating any significant changes to the schedule after the initiation of Central Corridor LRT service.

7.3.B.2 Speed Monitoring Protocol – The Met Council has established speed monitoring procedures employed to check compliance with light rail vehicle operating speed limits. These procedures will be employed to monitor compliance with Central Corridor LRT light rail vehicle speeds in the Research Corridor Impact Zone. When requested by the University, Met Council will provide, at no cost, data gathered during speed monitoring compliance checks. In the event the University has reason to believe that light rail vehicle speed limits (as set forth in the Agreement and in this Addendum) are being exceeded, the University may request that speed monitoring compliance be performed by Metro Transit staff and the monitoring will be performed in a timely manner. If the Met Council has reason to believe that requests for speed monitoring by the University are being made without basis, the Met Council may request the University reimburse Metro Transit for the costs of performing speed monitoring compliance. The University may conduct its own speed monitoring as well. The University will provide the results of such monitoring to the Met Council.

7.3.B.3 Train Audible Warning Devices – As of the date of this Addendum, the Met Council has developed and is in compliance with Horn and Bell Procedures as set forth in Section R4180 of the *Metro Transit Rail Operations Rule Book – 6th Edition.* It is anticipated this Rule Book will be amended prior to or concurrent with the beginning of Central Corridor LRT Revenue Service. These changes will reflect commitments made regarding the sounding of audible warning devices on the Central Corridor LRT, specifically that the sounding of the LRT horn on Central Corridor would only be done in emergency situations and would not be done as part of standard operating procedures. Notwithstanding the foregoing, while passing through the University Campus, the Central Corridor LRT horn shall be sounded only in emergencies, and not as a standard operating procedure. Metropolitan Council's Metro Transit operating division reserves the right to review standard operating procedures for sounding audible warning devices at the University of Minnesota and to revise such procedures appropriately in response to incidents and events.

7.3.C <u>Bus Operations on the Transit/Pedestrian Mall</u>

Bus Operations on the Transit/Pedestrian Mall – Recognizing the unique operating environment of the Transit/Pedestrian Mall, the parties have agreed that Metro Transit shall serve as the coordinator of transit services provided on the Transit/Pedestrian Mall.

For the purposes of this Addendum and the Agreement, coordinating transit services shall mean that Metro Transit shall:

7.3.C.1a Be provided advance (no less than four weeks) notification by the University of any changes to scheduled transit operations for the University transit service on the Transit/Pedestrian Mall.

7.3.C.1b Develop standard operating procedures for all transit providers that shall govern operations on the Joint Use Section of the Transit/Pedestrian Mall and the procedures that shall be enacted should buses need to divert from the Joint Use Section due to an emergency.

7.3.C.1c Develop a training program that shall be used to train all drivers operating transit vehicles on the Transit/Pedestrian Mall that shall effectively communicate the standard operating procedures developed for this area.

7.3.C.1d Develop a training program that shall be used to train drivers that may need to operate a vehicle on the Transit/Pedestrian Mall .

7.3.C.1e Administer Joint Use Section Operations training to all transit providers operating on the Transit/Pedestrian Mall that shall train drivers on standard operating procedures.

7.3.C.1f Provide certification of completion of Joint Use Section Operations training to all drivers, regardless of their system affiliation, operating transit vehicles on the Transit/Pedestrian Mall.

7.3.C.1g Require that all drivers, regardless of their system affiliation, be certified to operate on the Transit/Pedestrian Mall, which shall be accomplished by successful completion of the Joint Use Section Operations training.

7.3.C.2 Bus Operations on the Joint Use Section of the Transit/Pedestrian Mall – Rules and procedures for all bus operations on the Joint Use Section of the Transit/Pedestrian Mall shall be determined by the Met Council's transit operating division, Metro Transit. Metro Transit shall also have authority to monitor and enforce compliance with those rules and procedures.

7.3.C.2a Upon commencement of CCLRT revenue service, all transit vehicles, regardless of size or type, entering the Transit/Pedestrian Mall shall operate on the Joint Use

Section of the Transit/Pedestrian Mall and shall only divert from the Joint Use Section to operate on the adjacent Bike/Emergency Vehicle Lane under emergency conditions.

7.3.C.2b Emergency conditions shall be determined at the sole discretion of Metro Transit and may include, but shall not be limited to transit vehicle breakdowns, an incident involving a transit vehicle and any other vehicle, an incident involving a transit vehicle and a bicyclist/pedestrian, any other incident where either regularly-scheduled bus or train service is interrupted to respond to an incident.

7.3C.2c If Metro Transit determines that emergency conditions prevail on the Joint Use Section of the Transit/Pedestrian Mall, communications will go out from Metro Transit's Transit Control Center to all transit providers, as well as the University of Minnesota, alerting them that emergency operating conditions prevail. Under these circumstances, all transit vehicles will be required to divert from the Joint Use Section of the Transit/Pedestrian Mall to operate on the adjacent Bike/Emergency Vehicle Lane. Emergency operations on the Bike/Emergency Vehicle Lane shall be consistent with the Joint Use Section Standard Operating Procedures. If the University or Road Authority observes an emergency situation on the Joint Use Section, it should report it to Metro Transit's Transit Control Center. Transit providers should be alerted as to the nature of the emergency.

7.3.C.2d When Metro Transit determines that emergency conditions on the Joint Use Section of the Transit/Pedestrian Mall no longer prevail, appropriate notification will be given to all transit providers, as well as the University of Minnesota, and transit operations will resume on the Joint Use Section.

7.3.C.2e Procedures for an emergency that result in a complete closure are addressed in the Emergency Operations Plan.

7.3.D Special Event Operations – Metro Transit shall provide transit operations to serve special events (events anticipated to draw over 10,000 attendees) on the University Campus as needed based on the type and scale of the event and upon reasonable notification from the University. A period of no less than two weeks shall be considered reasonable advance notification. Understanding that some special events may preclude reasonable advance notification, Metro

Transit will endeavor to provide transit operations as adequately as possible given the timing of the notification and the type and scale of the event.

7.4 Traffic Signal Operations: Traffic signals on the Transit/Pedestrian Mall shall provide for pre-emption by emergency vehicles and light rail vehicles operating on the Transit/Pedestrian Mall. Detection will be used to detect buses and bicycles operating on the Transit/Pedestrian Mall. The City, through its Director of Public Works or designated representatives, shall discuss and coordinate with the Council and the University prior to making changes to the signal systems on the Transit Pedestrian Mall that may affect LRT operations.

7.5 Maintenance

7.5 A Transit/Pedestrian Mall Maintenance – The Met Council shall, at its expense, be responsible for the repair and replacement of improvements including sidewalks, signage, and lighting in the Amenity Zone area, as depicted in Exhibit E, F, and I. The standard of maintenance and repair within the Amenity Zone shall, at a minimum, be the standard the University generally employs for pedestrian-oriented places on the University Campus unless the Met Council and University agree upon an alternative standard.

7.5.B Maintenance of Bike/Emergency Vehicle Lane – The Road Authority shall be responsible for the Bike/Emergency Vehicle Lane. The Road Authority shall provide selected maintenance services, including but not limited to routine snow and ice control, for the Bike/Emergency Vehicle Lane.

7.5.C Maintenance of Retaining Walls – Retaining walls were installed by the Metropolitan Council as part of the Central Corridor Light Rail construction. Ownership of this infrastructure is detailed in Exhibit M. Ownership and maintenance responsibilities shall be as follows:

7.5.C.1 The University is responsible for the maintenance, repair and replacement of the retaining wall on the northside of Washington Ave between Harvard St and Walnut St.

7.5.C.2 The Met Council is responsible for the maintenance, repair and replacement of the walls separating the train guideway from the roadway between Church St and the Washington Ave Bridge.

7.5.C.3 The Met Council is responsible for the maintenance, repair and replacement of the walls located adjacent to the guideway that start just east of the Stadium Village Station on 23rd Avenue and that continue along the University transitway between 25th/29th Ave.

7.5.C.4 The University is responsible for the maintenance, repair and replacement of retaining walls on the east side of Pleasant Street opposite the Weisman Museum and on the south side of Delaware Street SE between Pleasant Street SE and East River Parkway.

7.5.C.5 The University is responsible for the maintenance, repair and replacement of retaining walls on the north and south sides of Arlington Street between Pleasant Street and the East River Road.

7.5.C.6 Retaining walls on the West Bank of campus are addressed in a separate agreement, and are not the responsibility of the University.

7.5.D Maintenance of Fence – The Met Council owns and shall have the responsibility for maintaining the fence installed on the University Campus as part of the CCLRT project, including in the Transit/Pedestrian Mall, the LRT station locations, and anywhere else that intertrack fencing is installed on the University Campus. If any fencing should pose a safety risk, the Met Council shall have 24 hours to repair or replace it. If the University has reason to believe that maintenance of fencing is required, or that a repair of an aesthetic nature is required, the University will notify the Met Council in writing.

7.5.E Maintenance of Lighting

7.5.E.1 The Met Council shall, at its expense, be responsible for the repair and replacement of improvements including lighting in the Amenity Zone. The standard of maintenance and repair within the Amenity Zone shall, at a minimum, be the standard the University generally employs for pedestrian-oriented places on the University Campus unless the Met Council and University agree upon an alternative standard. Met Council shall be responsible for replacing damaged, worn out and/or obsolete light fixtures within the station areas.

7.5.E.2 The Road Authority shall repair and maintain streetlight fixtures along the street as depicted in Exhibit F.

7.5.E.4 University has the right to approve any future changes to the type, color and/or location of the catenary, pedestrian/roadway lighting and traffic signal poles within station areas and the Transit/Pedestrian Mall (as depicted in Exhibit B).

7.5.F Maintenance of Traffic, Pedestrian and LRT Signs

7.5.F.1 The City shall be responsible for the repair, replacement and maintenance of all traffic and pedestrian signs related to vehicular or pedestrian traffic on City streets.

7.5.F.2 Met Council shall be responsible for the repair, replacement and maintenance of all signs related to the operation of and guide signs to the LRT System, including but not limited to the "Train Approaching" signs, signs on LRT Stations, the electronic blank out signs associated with LRT operations, etc. The Met Council may request and bear all costs for LRT System signs being placed on City streets or University streets with the City or University's approval.

7.5.F.3 Met Council shall be responsible for the repair, replacement and maintenance of the appropriate vertical clearance signs for the OCS wires that cross City streets or University streets. Sign locations shall be reviewed and approved by the City if on City streets or University if on University streets prior to installation.

7.5.F.4 The University shall be responsible for the repair, replacement, and maintenance of the five intersection monuments (decorative concrete post with ball as constructed by the project) in the Transit/Pedestrian Mall. The University will be responsible for the maintenance, repair, and replacement of the entry monument installed at the southeast corner of Pleasant St SE and Washington Ave.

7.5.F.5 The University will install and maintain, at its cost, electronic signage related to its bus tracking and annunciation system at the Northrop Mall bus stop. The Metropolitan Council and University will work in partnership to integrate their bus tracking systems on a shared/proportional cost basis.

7.5.G <u>Maintenance of Traffic Control Signals, LRT Signals and EVP System</u>

Exhibit Q indicates infrastructure that the City will maintain. Exceptions are noted on the Exhibits.

7.5.G.1 The City shall own and maintain the vehicular and pedestrian traffic signals and sign system. See Exhibit Q1 for responsibilities at each signal. The City shall have the responsibility to maintain the following componentry:

- Traffic signal indications, brackets, and housings for pedestrians, bicycles and motor vehicles
- Pedestrian Pushbuttons
- Motor Vehicle Detection
- EVP Indications
- Traffic signal poles and mast-arms that are NOT attached to the Overhead Contact System
- Conduits, wires and cables that OUTPUT from the traffic signal controller cabinet for the purpose of controlling the indications as are part on the signal system, sign system and EVP system.
- Conduits and wires that power the Traffic Signal systems as identified in Exhibit Q
- Conduits and cable (Interconnect System) that allow for the communication to the traffic signal systems from the City's Centralized Traffic Signal Control System located at 300 Border Ave. N Minneapolis, MN.
- Locating underground conduits as identified in Exhibit Q

7.5.G.2 Met Council shall own and maintain the LRT Signals that are connected to the Traffic Control Signal system, including, but not

limited to, LRT signal heads (bar signals), poles, LRT detectors and associated conduit and cables.

7.5.G.3 Met Council shall maintain the wiring including conduits of the LRT System up to the Traffic Control Signal system. The City shall maintain the LRT wire terminations within the Traffic Control Signal controller cabinets.

7.5.H Maintenance of Pavement Markings

7.5.H.1 The Road Authority shall maintain all pavement markings located on City streets, the primary purpose of which is to direct vehicle, bike and/or pedestrian traffic for the purpose of street use.

7.5.H.1 The Met Council shall maintain all pavement markings located on City streets and University streets the primary purpose of which is to direct vehicle, bike and/or pedestrian traffic for LRT operations.

7.5.I Graffiti Removal

7.5.I.1 Met Council shall be responsible for graffiti removal on the LRT System. If graffiti is not removed within 24 hours of the reported incident, the University shall retain the opportunity to conduct removal of graffiti located in the University area at the Met Council's expense.

7.5.I.2 The Road Authority shall be responsible for graffiti removal in the public right-of-way along the Central Corridor LRT line. The City of Minneapolis graffiti removal policy is included as Exhibit N. The University shall retain the opportunity to conduct removal of graffiti located in the University area. This work shall require pre approval from the City of Minneapolis and shall be in accordance with City policy.

7.5.J Stormwater/Sewer Ownership Maintenance

7.5.J.1 Stormwater/sewer ownership is depicted in Exhibit J. Maintenance of stormwater/sewer shall be the responsibility of the appropriate owner as depicted in Exhibit J or as otherwise documented in other agreements between the Parties.

7.5.K Landscaping

7.5.K.1 University shall be responsible for the day-to-day maintenance of landscaping (as depicted in Exhibit E). Met Council, in consultation with Facilities Management – Landcare, will trim the trees at the University's expense.

7.5.K.2 University staff working in the Amenity Zone or station areas shall complete Metro Transit's safety training for working around tracks and OCS poles.

Changes to improvements or landscaping must be approved by Metropolitan Council, the University, and the affected Road Authority.

7.5.K.3 University shall, at its own expense, be responsible for landscaping replacement as depicted in Exhibit E.

7.5.L Snow Removal

7.5.L.1 Met Council shall be responsible for snow plowing in the station areas and LRT guideway. The Road Authority shall be responsible for snow and ice control within the Bike/Emergency Vehicle Lane and the bus bays at Northrop Mall and Coffman Memorial Union.

7.5.L.2 The University shall be responsible for day-to-day snow and ice control as depicted in Exhibit G. The University will install signs indicating areas that are closed for the season.

7.5.L.3 University staff working in the Amenity Zone or station areas shall complete Metro Transit's safety training for working around tracks and OSC poles.

7.5.M Street Furniture

7.5.M.1 The University shall complete minor repairs to street furniture as necessary. A work permit from the Met Council will not be required.

7.5.M.2 In the event the University is unable to repair the street furniture at a reasonable cost, notification of this condition will be provided in writing to the Met Council and the Met Council will subsequently perform an inspection to assess the street furniture's condition. Upon completion of the inspection, the Met Council will notify the University as to whether it concurs in the University's assessment regarding the need for replacement. In the event the Met Council concurs the street furniture inspected requires replacement, the Met Council will remove the noted article of street furniture and provide in its response to the University a general timeframe on when a new article will be delivered and installed.

7.5.N Solid Waste/Trash

7.5.N.1 University shall be responsible for day-to-day removal of solid waste and trash in the Amenity Zone as depicted in Exhibit H.

7.5.O Coordination of Routine Track Maintenance & Roadway Maintenance to Minimize Disruption

7.5.O.1 The City, Met Council and University shall coordinate their maintenance efforts to minimize disruption to the other Parties and to the public.

7.5.O.2 Met Council designates the Rail Control Center for the coordination of track, roadway and utility maintenance to minimize disruption to the City and to the general public.

7.5.O.3 The City designates the City Engineer or designee for the coordination of track, roadway and utility maintenance to

minimize disruption to Metropolitan Council and to the general public.

7.5.O.4 The University designates the Vice President for University Services or designee for the coordination of track, roadway and utility maintenance to minimize disruption to Metropolitan Council and to the general public.

7.5.P Miscellaneous Infrastructure:

7.5.P.1 Met Council owns and will maintain the OCS touch and pier protection systems installed on the University's pedestrian bridges that connect Coffman Union to Northrop Mall over Washington Avenue.

7.5.P.3 Not Used.

7.5.P.4 The Met Council shall, at its expense, be responsible for the maintenance, repair and replacement of sidewalks and pavers in the Amenity Zone, as depicted in Exhibit I. The standard of maintenance and repairs in this area shall, at a minimum, maintain the original quality of the design unless the Met Council and University agree upon an alternative standard. The University agrees to perform day-to-day maintenance on behalf of Metropolitan Council, at Metropolitan Council's cost, if such repairs are agreed-to in advance of work performed.

7.5.P.5 Except as addressed by 6.2B of the Agreement, sidewalk repair and replacement, outside of the Amenity Zone, shall be addressed per the City of Minneapolis' sidewalk policy.

7.5.P.6 The Road Authority is responsible for the maintenance, repair, and replacement of tree grates and catch basins installed as part of the LRT project within City right-of-way.

7.5.P.7 The University may, on a space available basis, provide storage for LRT-related replacement components. Advanced notice of 10 business days is requested, which should include item name, item description, and required storage space. The notice should be given to the Facilities Management Call Center at 612-624-2900.

7.6 LRT System & Traffic Signal Interaction (See Also Maintenance of Traffic Control Signals, LRT Signals and EVP System)

7.6.A Best practices will be used by the University, City and Met Council to reduce the conflicts and impacts among the LRT System, emergency vehicles, pedestrians, and street traffic.

7.7 Payment of Electrical Power Costs

Electrical power costs shall be paid as follows:

7.7.A The City shall pay the electrical power costs for the City-owned traffic control signals, streetlight fixtures and EVP System attached to standard poles.

7.7.B Met Council shall pay the electrical power costs for the electricity used to power the LRT, and the LRT related devices, such as flashing lights, warning devices, train control equipment, gate arms etc.

7.7.C Met Council shall pay the electrical power costs for the electric used to power the LRT station lighting.

7.7.D The University shall pay for the electricity costs for the bollard lighting located within the Amenity Zone between Walnut and Harvard streets and Union and Church streets, as depicted in Exhibit F.

7.8 Naming Rights

The three LRT stations serving the Minneapolis Campus will be named in accordance with Exhibit K, "Naming Rights."

ARTICLE 8 – FEES AND PERMITS

For purposes of this Addendum, all provisions of Agreement Article 8 remain unchanged.

ARTICLE 9 – RIGHTS OF WAY AND EASEMENTS

For purposes of this Addendum, all provisions of Agreement Article 9 remain unchanged.

ARTICLE 10 – REMEDIES; DISPUTE RESOLUTION

10.6 Remedies related to the Performance Standards amended as part of the Operations and Maintenance Addendum. For the purposes of sections 10.1, 10.2, and 10.3 of the Agreement, the original Vibration and EMI Performance Standards specified in the Agreement will apply rather than the amended Performance Standards specified in this Operations and Maintenance Addendum.

ARTICLE 11 – MISCELLANEOUS PROVISIONS

For purposes of this Addendum, all provisions of Agreement Article 11 remain unchanged.

IN TESTIMONY WHEREOF, the Parties have caused this Addendum to be executed by their respective duly authorized representatives on the dates indicated.

Regents of the University of Minnesota

By: _____

Name: Pamela Wheelock

Title: Vice President University Services

Date: _____

Approved as to form:

By: _____

Name: William P. Donohue

Title: General Counsel

Date: _____

Metropolitan Council

By: _____

Name: Susan Haigh

Title: Chairperson

Date: _____

Approved as to form:

By: _____

Office of the General Counsel

Date: _____

Hennepin County

By: _____

Name:

Title: Chair of Its County Board

Date: _____

Attest:

By: _____

Name:

Title: Deputy Clerk of County Board

Date: _____

By: _____

Name: _____

Title: County Administrator

Date: _____

Reviewed by the County Attorney's Office

By: _____

Name: _____

Title: Assistant Hennepin County Attorney

Date: _____

City of Minneapolis

By: _____

Name:

Title: Department Head responsible for Contract Monitoring for this contract

Date: _____

Countersigned:

By: _____

Name:

Title: Finance Office Designee

Date: _____

Approved as to form:

Name:

By: _____

Title: Assistant City Attorney

List of Exhibits

Exhibit A: Joint Use Section Map

Exhibit B: Transit/Pedestrian Mall

Exhibit C: Vibration Monitoring System Design Plans

Exhibit D: Vibration Monitoring System Specifications

Exhibit E: Landscaping Responsibilities Figure

Exhibit F: Lighting Responsibilities Figure

Exhibit G: Snow and Ice Control Responsibilities

Exhibit H: Solid Waste / Trash Removal Responsibilities Figure

Exhibit I: Sidewalk / Paver Maintenance Responsibilities Figure

Exhibit J: Stormwater / Sewer Ownership Responsibilities

Exhibit K: Station Naming Rights

Exhibit L: Track Sharing Study

Exhibit M: Retaining Wall Responsibilities

Exhibit N: City of Minneapolis Graffiti Removal Policy

Exhibit O: EMI Impact Zone

Exhibit P: U of M Vibration Performance Standard

Exhibit Q: Traffic Control Signals

Exhibit R: Obstruction Permit Fee Exemption Area

Exhibit S: Truck Detour Route